

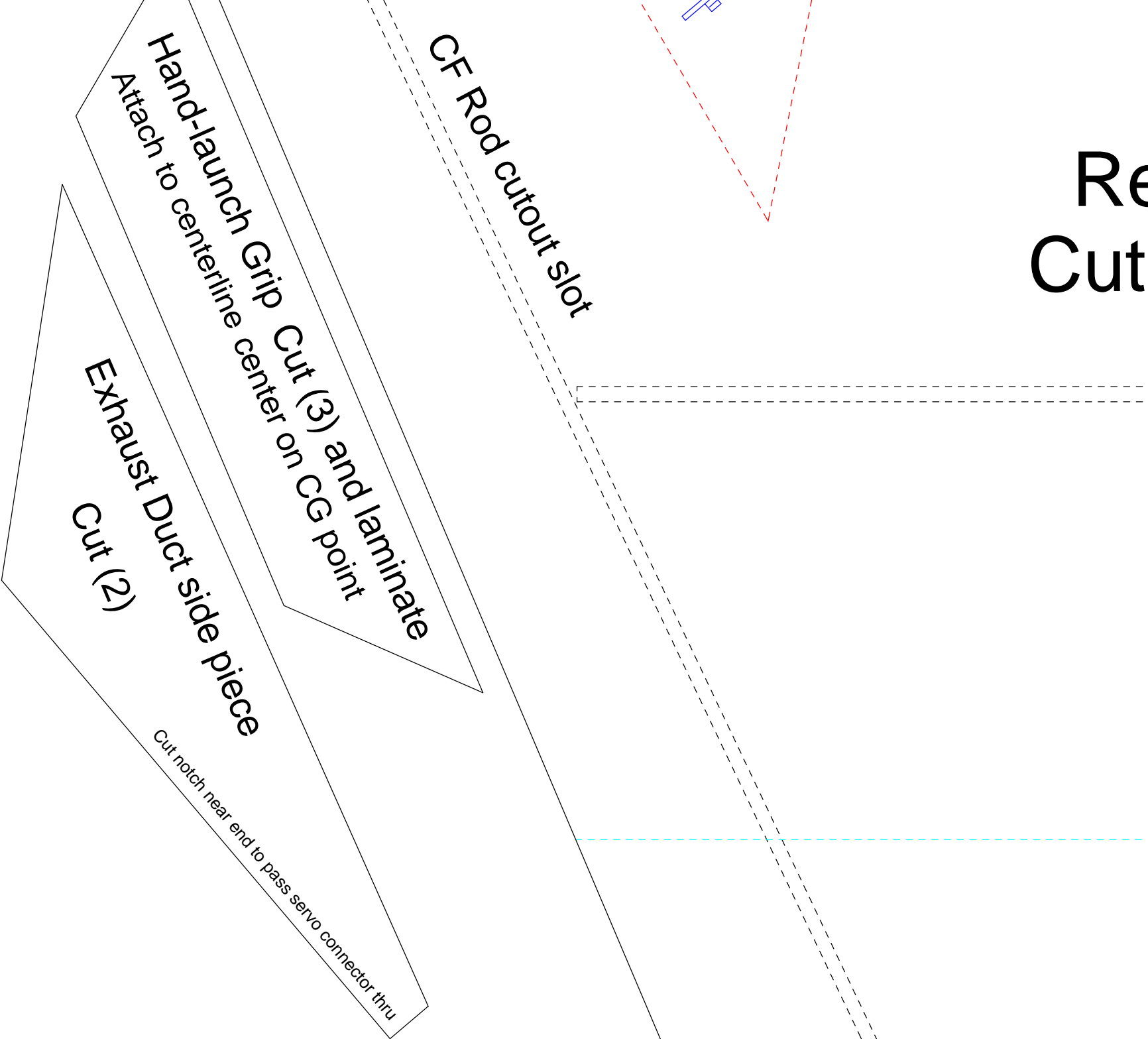
Re  
Cut

CF Rod cutout slot

Hand-launch Grip Cut (3) and laminate  
Attach to centerline center on CG point

Exhaust Duct side piece  
Cut (2)

Cut notch near end to pass servo connector thru

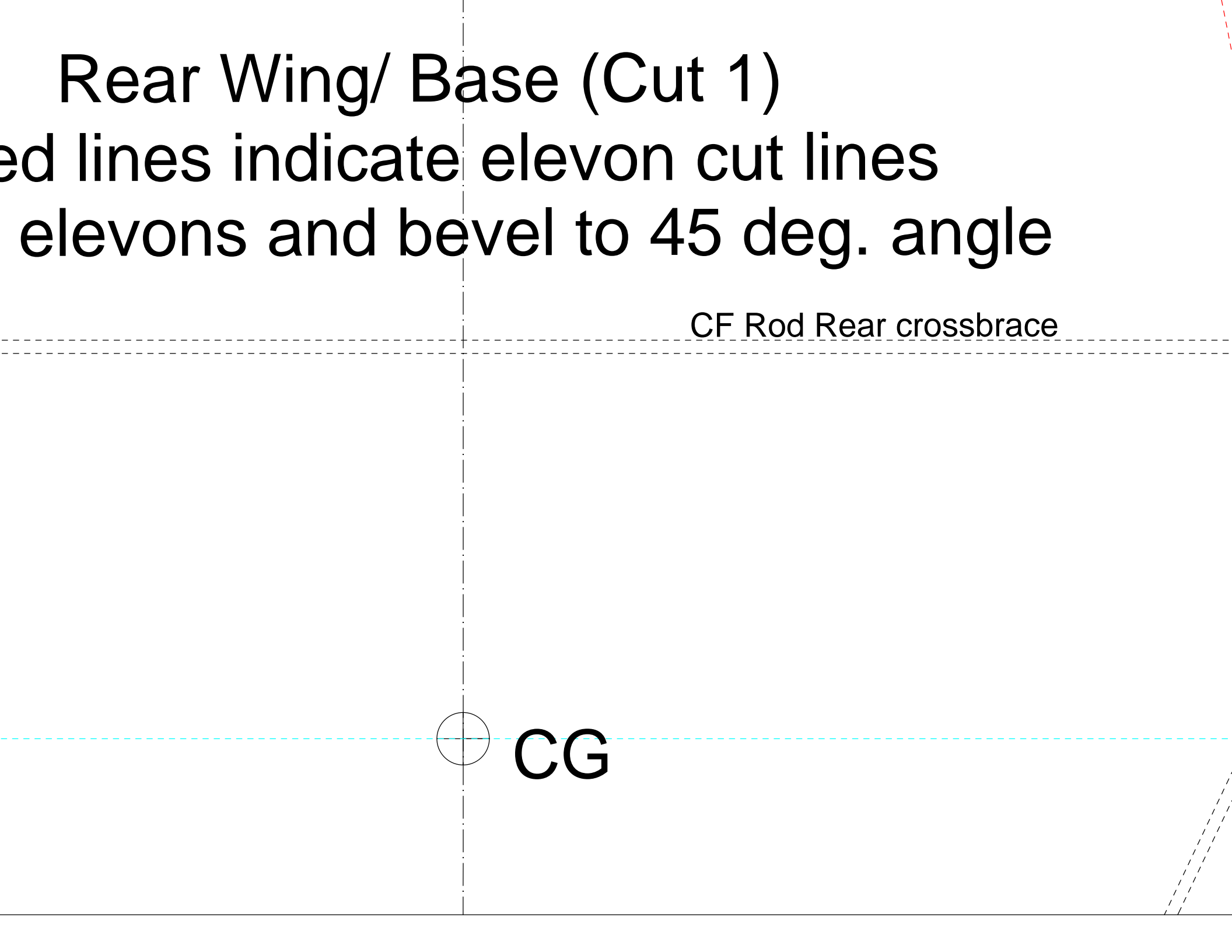


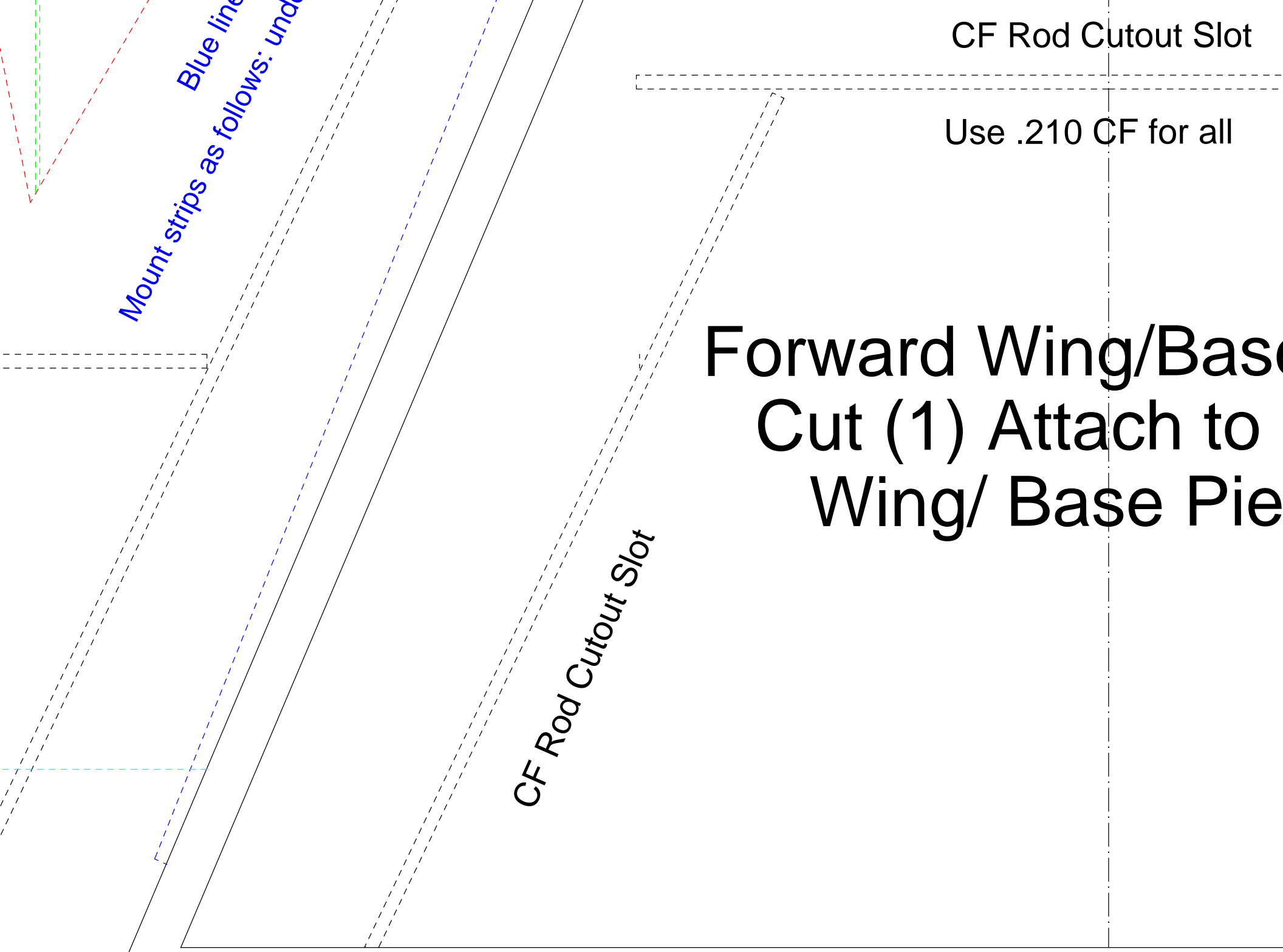
# Rear Wing/ Base (Cut 1)

Dashed lines indicate elevon cut lines  
elevons and bevel to 45 deg. angle

CF Rod Rear crossbrace

CG

The diagram shows a technical drawing of a rear wing or base structure. A vertical dashed line runs down the center, and a horizontal dashed line runs across the middle. A horizontal dashed line is also shown near the top. A small circle with a cross inside is located on the vertical dashed line, labeled 'CG'. A horizontal dashed line is also shown near the bottom. A solid horizontal line is at the very bottom. In the top right corner, there is a red dashed line. In the bottom right corner, there are two parallel dashed lines forming a trapezoidal shape.



CF Rod Cutout Slot

Use .210 CF for all

Mount strips as follows: Under

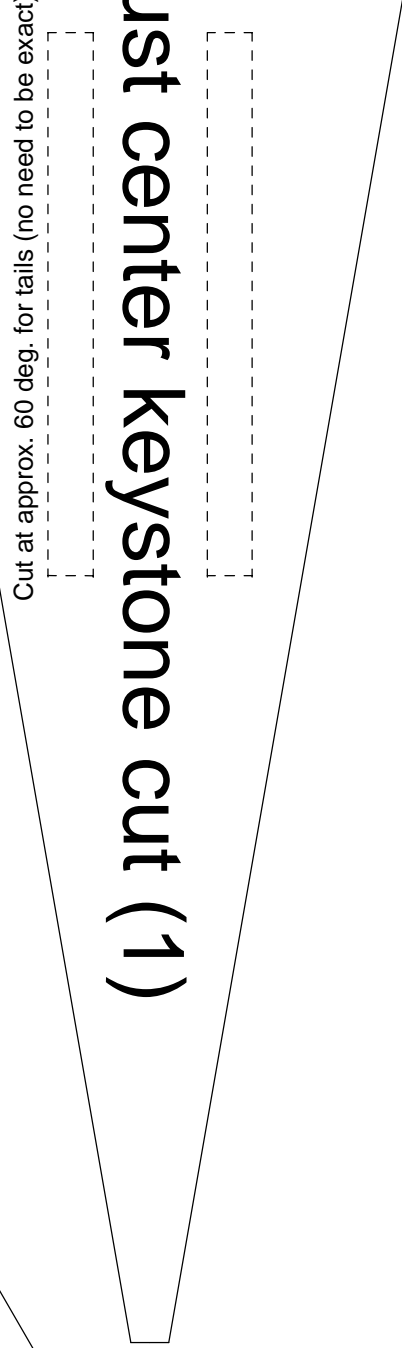
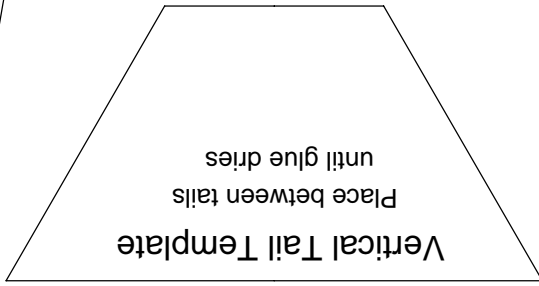
CF Rod Cutout Slot

Forward Wing/Base  
Cut (1) Attach to  
Wing/ Base Piece

the Piece  
Rear  
ce

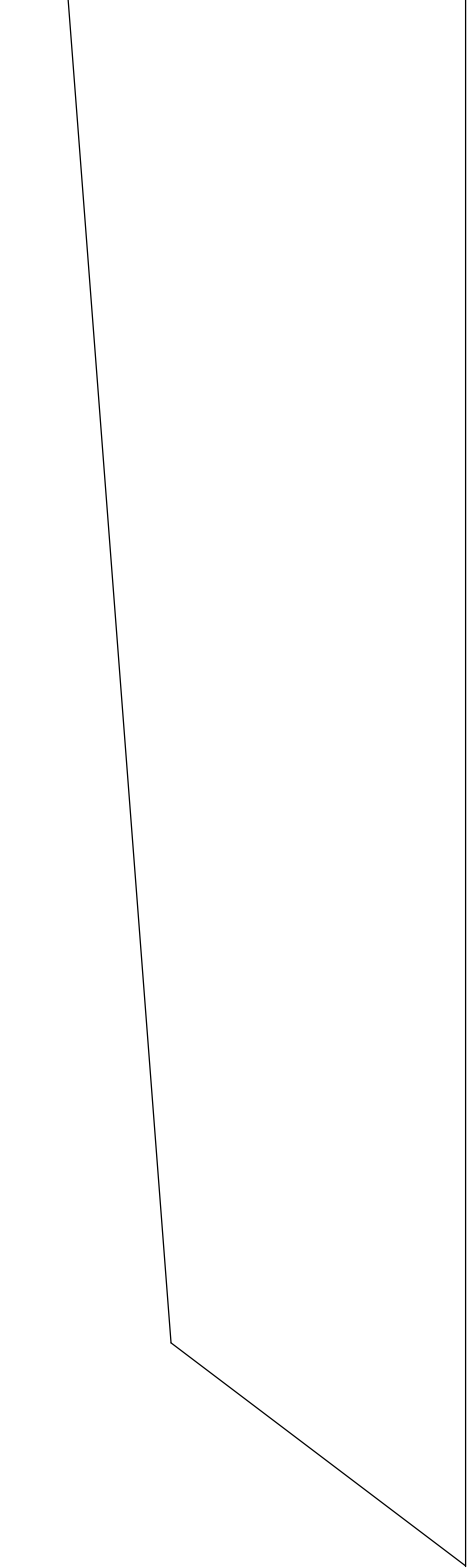


Cockpit front Cut (1)



Just center keystone cut (1)

Cut at approx. 60 deg. for tails (no need to be exact)



Control Horns



Cut (2) from 1/32 ply or polycarbon plastic



Intake bottom piece Cut (2)

top

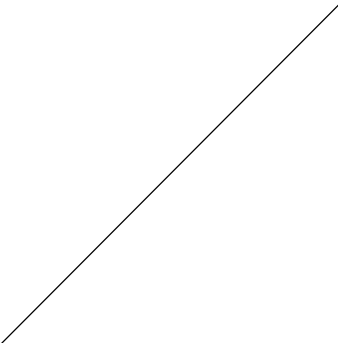
bottom

inside edge

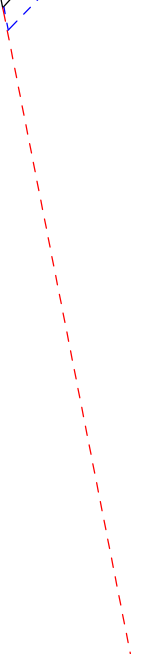
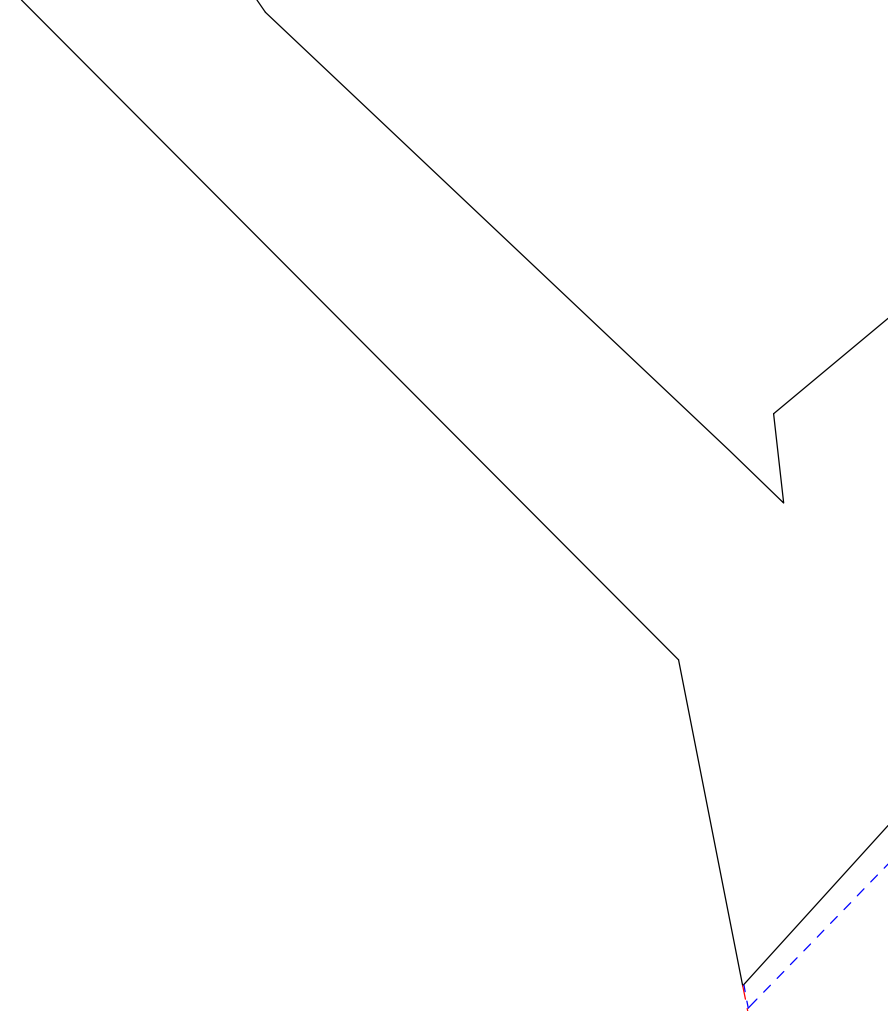
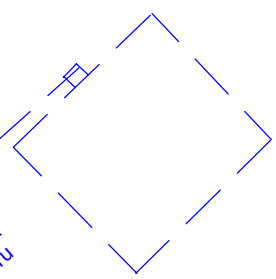
Lower cockpit side piece  
Cut (2)

Bottom side

Approximate Servo/Control P  
Double check angles to m  
Cut notch in Fuselage to  
Double check no flexi



Rod placement  
Make sure it is correct  
to pass control rod thru  
without binding



Green lines indicate elevon vortex generator strip placement  
Use thin 2mm balsa strip or cut strips from FFF/depron  
Install on top and bottom of both elevons

Blue lines indicate placement of forced washout strips  
along leading edge of wing and atop trailing edge of elevons

The diagram shows a cross-section of an airfoil with several dashed lines indicating the placement of strips. A red dashed line runs along the upper surface of the airfoil. A blue dashed line runs along the leading edge of the wing and the trailing edge of the elevons. Green dashed lines are placed on the top and bottom surfaces of the elevons. A black dashed line outlines the trailing edge of the airfoil.

Blue lines indicate placement of forced washout strips  
along leading edge of wing and atop trailing edge of elevons



bottom piece Cut (2)  
bottom edge

rear edge

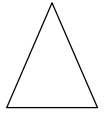
Cockpit side piece Cut (2)  
bottom edge

Exhaust panel Cut (2)

Rear Edge

Front Edge

Top Cockpit Piece



Cut (1)  
Trim to shape

Exhaust



(1) 3/8 hardwood stick for motor mount.

Keep in mind...any angle variation from my build will result in a difference.  
Also, try to minimize curving of fuselage base piece during fuse construction.

9. When placing magnets, space them evenly along the edges of the Fuselage Base piece.

Use more magnets at the front and rear, and remember to avoid placing magnets where the CF spars are. My advice is to mount the magnets to the fuselage base piece before building the fuselage, then press the fuselage base piece against the wing/base piece to make

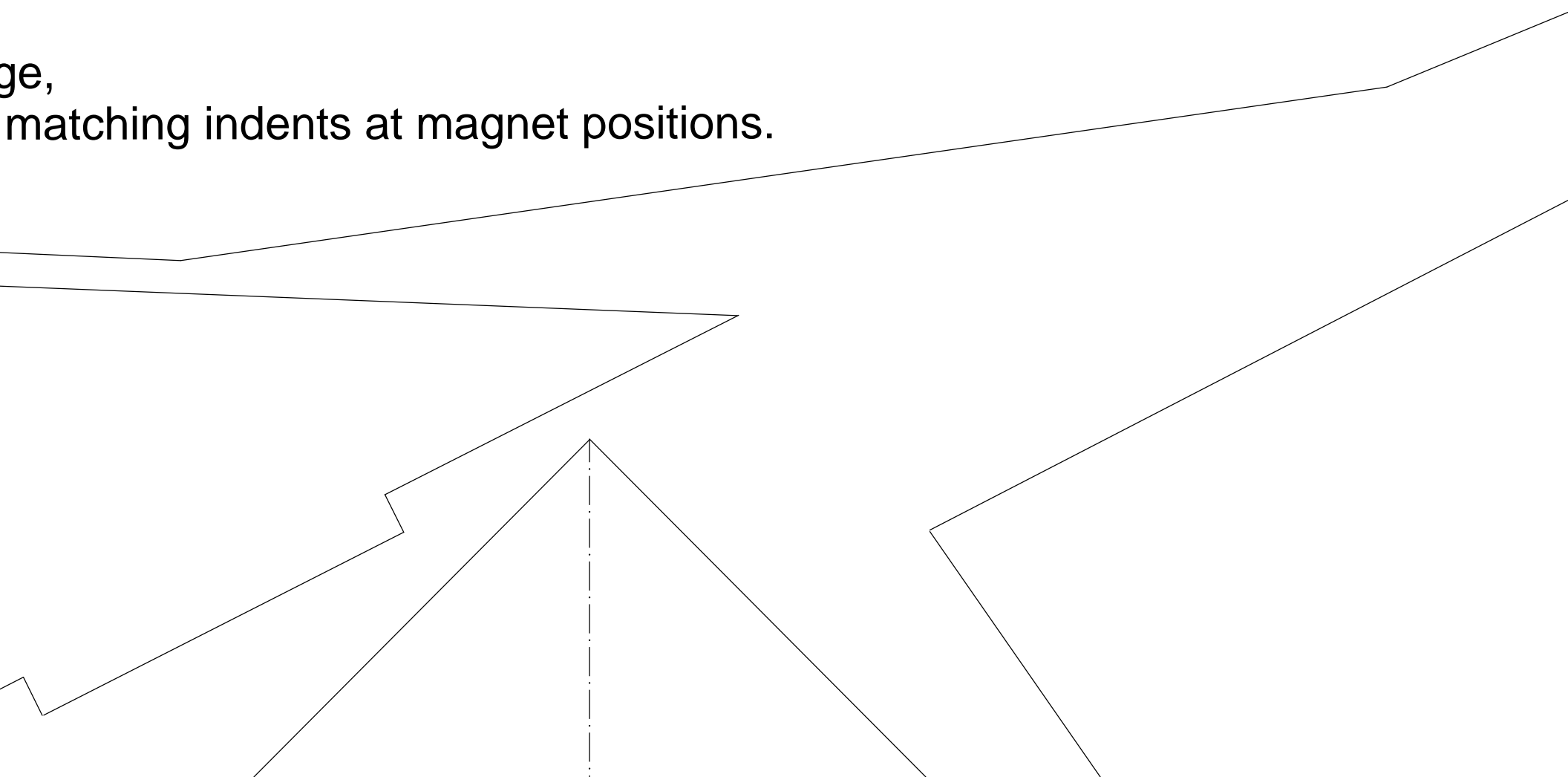


Vertical Tail (Cut 2)

*This area should be in back of exhaust panel*

or that step...depending on placement of parts, adjustments may need to be made to get the best possible result for you. Keep in mind these plans are BETA only. They are for your reference only. They are not for construction, but a little curvature won't hurt the flight characteristics.

ge,  
matching indents at magnet positions.

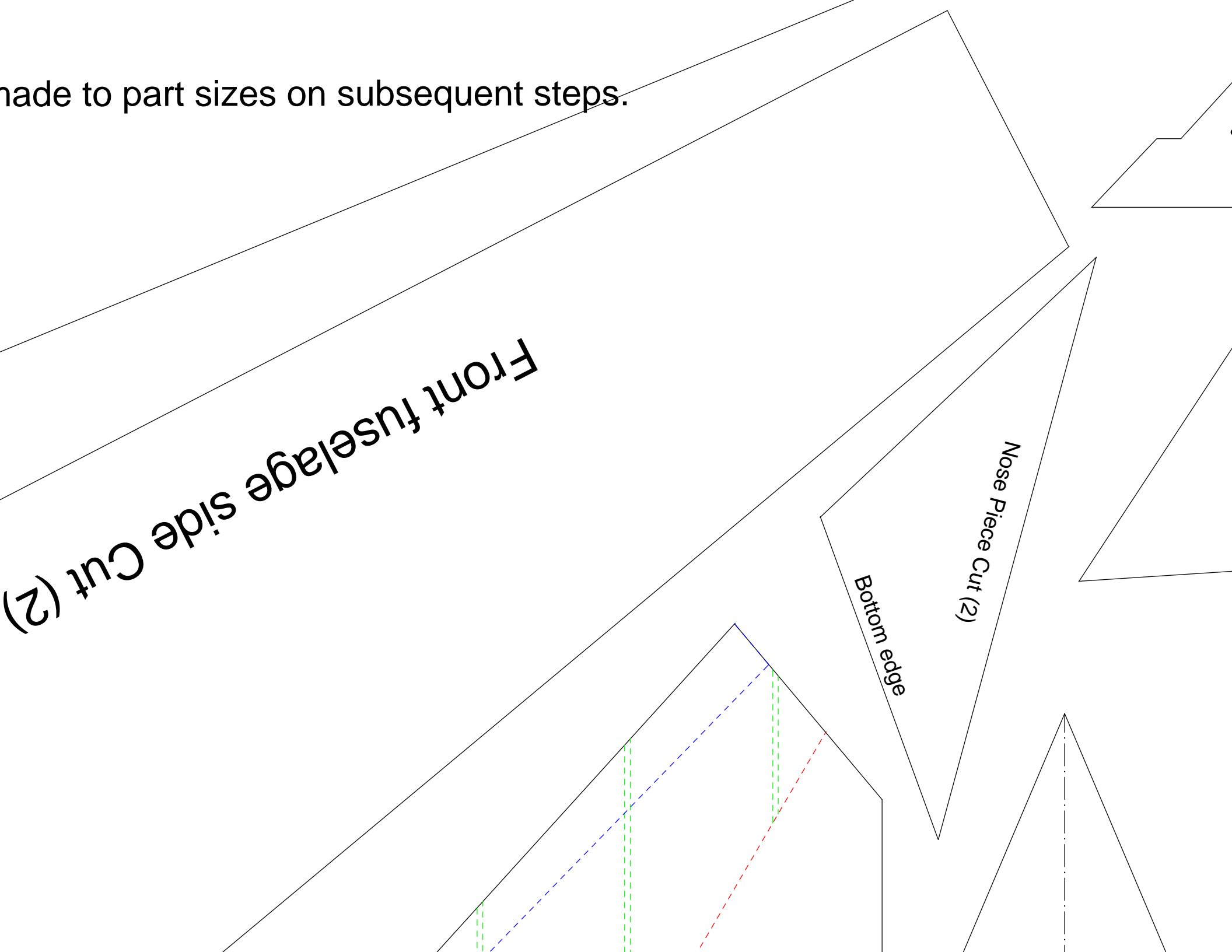


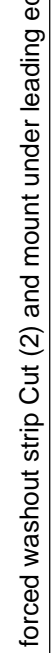
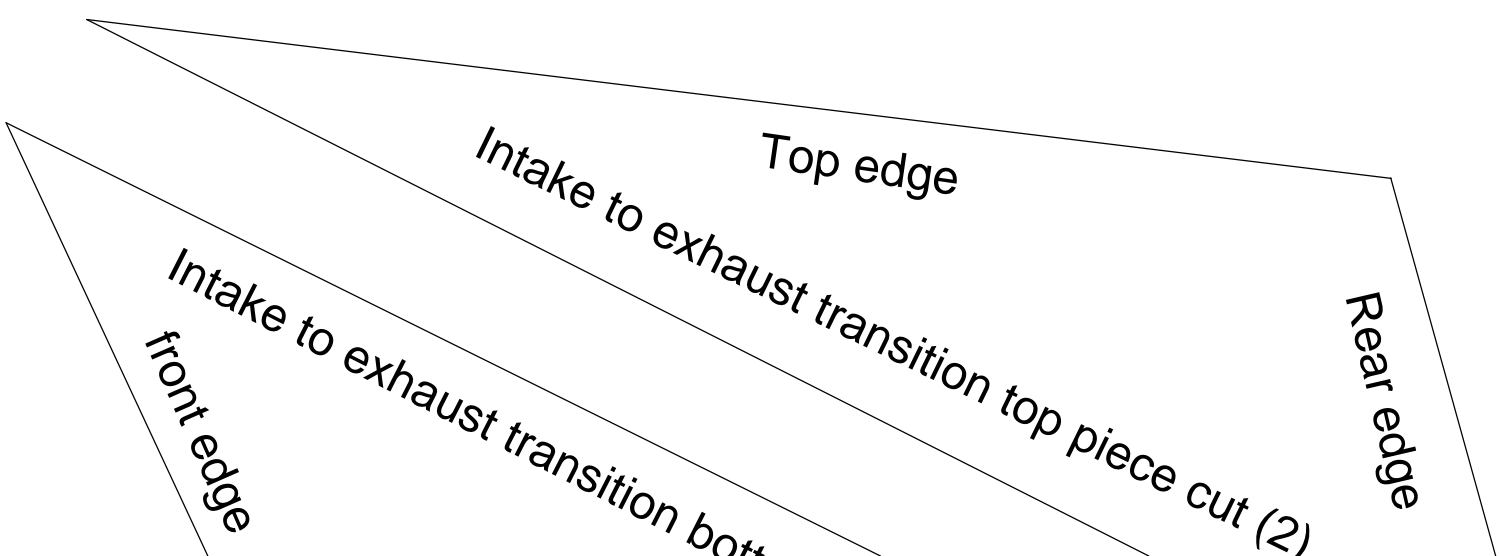
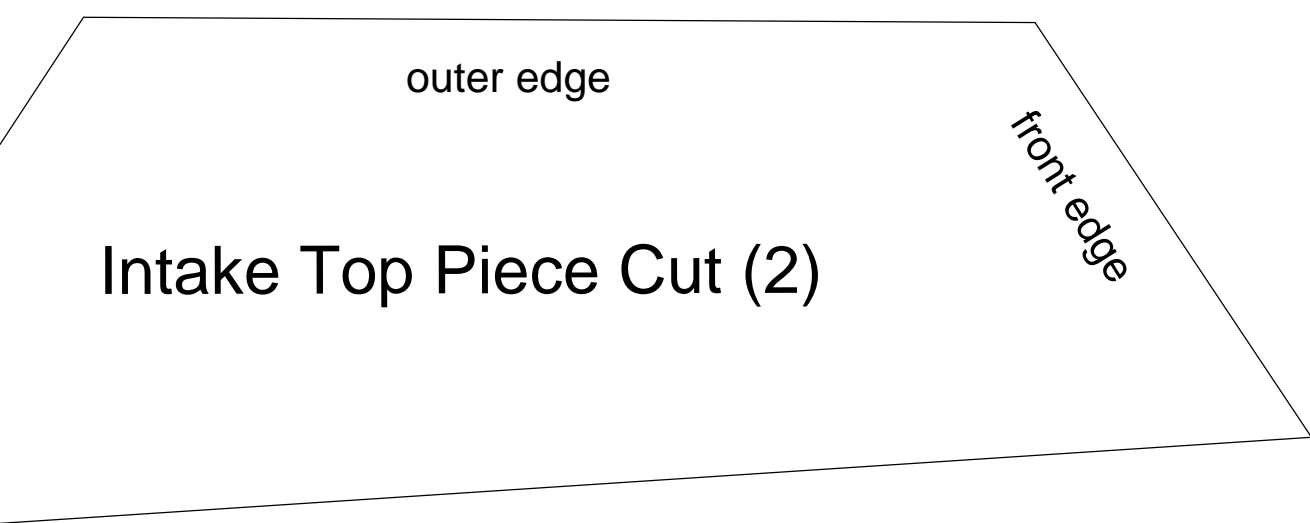
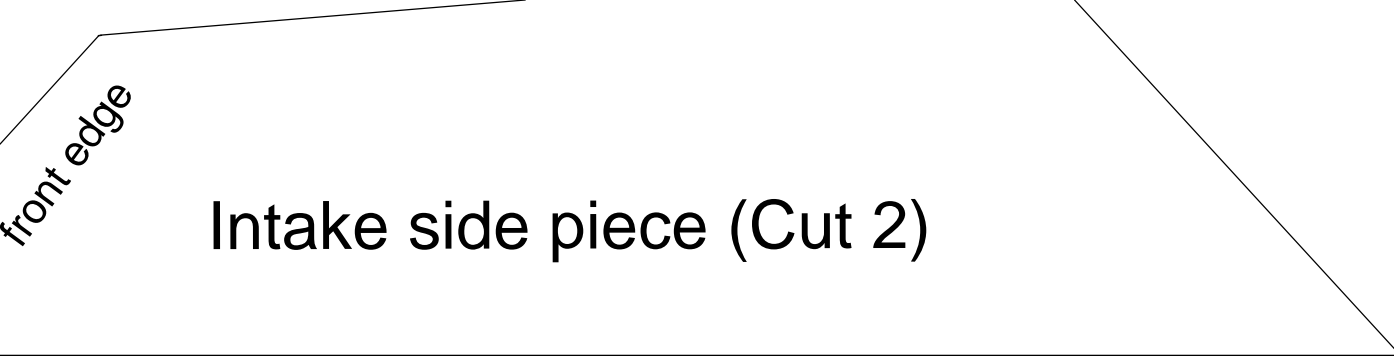
made to part sizes on subsequent steps.

Front fuselage side Cut (2)

Bottom edge

Nose Piece Cut (2)



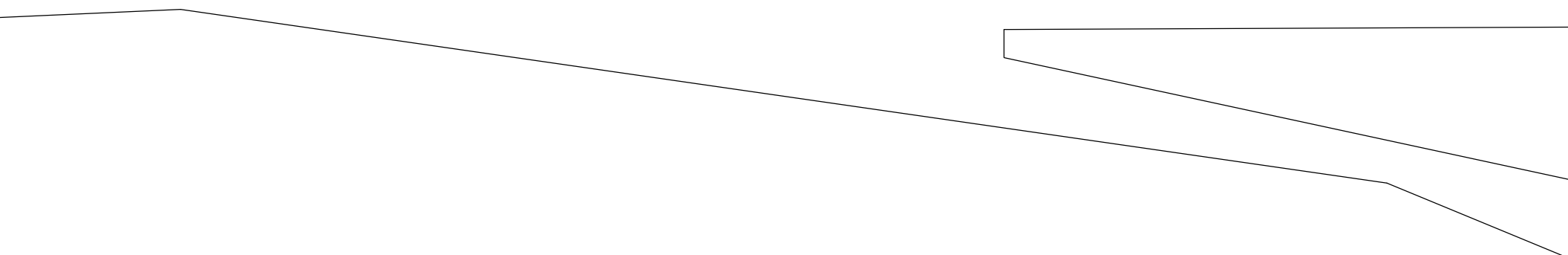


Internal spine /motor mount piece C

## General Tips

1. All fuselage pieces need to be beveled at varying degrees for proper fit.
2. I recommend using UHU Creativ glue for joining fuselage pieces for flexibility.
3. Start with 1/2 inch up and down deflection on elevons and adjust to your flying style.
4. If possible, use exponential on radio mixing to soften control throws.
5. Have fun! Any questions please email me at [dcobra\\_98@yahoo.com](mailto:dcobra_98@yahoo.com) or visit my website.
6. CG measurement on 100% scale is 52cm along centerline from nose tip.
7. Materials needed /recommended:
  - 2-3 sheets depron/FFF/sturdyboard
  - 1/32 lite ply for control horns
  - Polyurethane glue, foam safe CA, UHU Creativ Glue
  - Thin balsa strips (1/32 I think)
  - (2) Servos I used Hitec HS-55's
  - (1) Brushless motor/ESC/Prop - I used HET Typhoon 15/10, EFlite 20 amp
  - (1) Receiver - I used Hitec Electron 6. Minimum Rx would be 4 channel
  - (3) 61mm .210 CF rods or equivalent length
  - Scotch Satin tape for elevon hinges, tape over CF rods
  - (124) 1/8 x 1/16 N48 Neodymium disc magnets (doubled-up) or approx 248





g style.

discussion thread at <http://www.rcgroups.com/forums/showthread.php?t=481872>  
o, or 56cm along wing leading edge from nose tip.

mp ESC, and APC 8x6 SF prop  
and Transmitter needs to be capable of elevon or V-Tail mixing

Fusela

imately (62) 1/4 x 1/16 magnets.

Top Spinal Piece Cut (2)

Large Base Piece (Cut 1)

top edge

Aft Intake t



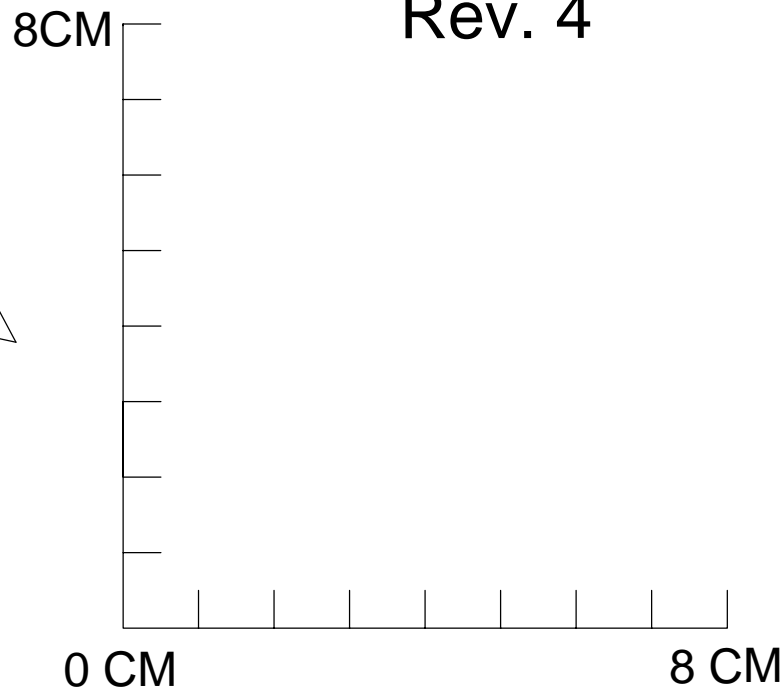
# Lockheed-Martin F-117A Nighthawk

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Rev. 4



rear edge

ge  
top Cut (2)  
front edge

edge of each elevon (refer to blue stich lines)

edge of wing (follow blue stiched lines)

it a

Cut away corner after motor mount glue dries for better appearance

# Cut (3) and laminate

Cutout for motor mount stick

Cut stick to length for motor setup used